



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/454,221	12/09/1999	MADAN MOHAN R. APPIAH	MS1-435US	3503

22801 7590 01/13/2004

LEE & HAYES PLLC  
421 W RIVERSIDE AVENUE SUITE 500  
SPOKANE, WA 99201

EXAMINER

WILLETT, STEPHAN F

ART UNIT	PAPER NUMBER
----------	--------------

2141

DATE MAILED: 01/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/454,221

**Applicant(s)**

APPIAH ET AL.

**Examiner**

Stephan F Willett

**Art Unit**

2141

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 23 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-41 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 31 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The “but that is a subsequent driver identifier mapped to the received driver identifier as a pervious identifier” is unclear.

**Claim Rejections - 35 USC § 103**

1. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103© and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).
2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary

Art Unit: 2141

skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 14-17, 26-28, 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kathail et al. with Patent Number 5,802,365 in view of Gao with Patent Number 6,581,094.

4. Regarding claim(s) 1, 14-17, 26-28, 33, 35, Kathail teaches determining driver compatibility. Kathail teaches receiving a driver identifier for a printer attached to the client by the client, col. 21, lines 48-49, col. 7, lines 4-15, and col. 6, lines 5-6 by hardware and software, col. 4-5, lines 66-1 and by “computer implemented steps”, col. 55, line 7. Kathail teaches selecting a closest matching driver, col. 21, lines 58-63. Kathail teaches installing the selected driver, col. 22, lines 19-23. Kathail teaches printing using the installed driver, col. 3, lines 41-42. Kathail teaches a network interface card as the “Macintosh line”, col. 5, line 21 with their clear AppleTalk network connectivity applicable to added systems, col. 1, lines 22-23, col. 3, lines 41-42 which is a “client-server environment”. Kathail teaches a driver library as DLL, col. 10, lines 62-63. Kathail teaches the invention in the above claim(s) except for explicitly teaching installing a print driver on the server side for printing at the client printer. In that Kathail operates to generate compatible drivers, the artisan would have looked to the software upgrade arts for details of implementing software compatibility. In that art, Gao, a related network driver upgrade, teaches “the device vendor applications allow vendor of digital devices to supply updates and enhancements to digital devices within the networked environment”, col. 3, lines 1-3 in order to provide a driver for a server. Gao specifically teaches “the UDD files may include a UDD file for the server and UDD files for other digital devices within the networked environment”, col. 3, lines 31-33, such as “the digital appliance may be a printer”, col. 3, lines 64-65 and “the UDD file for the digital appliance may be stored on the server computer”, col. 4, lines 3-4, thus “the UDD to perform various information exchange, status monitoring, and format conversion operations ... job spooling”, etc., col. 5, lines 23-51. Print driver capability at the

server is taught to print at a client. Further, Gao suggests advanced functions such as “a second printer can be chained into a first printer UDD to be a backup”, col. 14, lines 34-35 will result from implementing his print sharing system. The motivation to incorporate server based printing insures that distributed processing in an open platform is supported, especially with thin-clients. Thus, it would have been obvious to one of ordinary skill in the art to incorporate a server print driver as taught in Gao into the driver update system described in the Kathail patent because Kathail operates with drivers and Gao suggests that optimization can be obtained with print drivers based on a distributed server network. Therefore, by the above rational, the above claim(s) are rejected.

5. Claims 1-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kathail et al. with Patent Number 5,802,365 in view of Cavill with Patent Number 6,003,069.

6. Regarding claim(s) 1, 14-17, 25-28, 33, 35, Kathail teaches determining driver compatibility. Kathail teaches receiving a driver identifier for a printer attached to the client by the client, col. 21, lines 48-49, col. 7, lines 4-15, and col. 6, lines 5-6 by hardware and software, col. 4-5, lines 66-1 and by “computer implemented steps”, col. 55, line 7. Kathail teaches selecting a closest matching driver, col. 21, lines 58-63. Kathail teaches installing the selected driver, col. 22, lines 19-23. Kathail teaches printing using the installed driver, col. 3, lines 41-42. Kathail teaches a network interface card as the “Macintosh line”, col. 5, line 21 with their clear AppleTalk network connectivity applicable to added systems, col. 1, lines 22-23, col. 3, lines 41-42 which is a “client-server environment. Kathail teaches a driver library as DLL, col. 10, lines 62-63. Kathail teaches the invention in the above claim(s) except for explicitly teaching installing a print driver on the server side for printing at the client printer. In that Kathail operates to generate compatible drivers, the artisan would have looked to the software upgrade arts for details of implementing software compatibility. In that art, Cavill, a related network

Art Unit: 2141

print driver, teaches “where diversion of the print data creation task away from the requesting computer might be desirable”, col. 3, lines 38-40 in order to provide a driver for a server. Cavill specifically teaches “the server side driver subsystem also includes means for processing the print job”, col. 4, lines 3-5, but “traditional NC printing model [is] ... that GUI models are known by platform already”, col. 2, lines 20-22. . Print driver capability at the server is taught to print at a client as necessary. Further, Cavill suggests that “the same print driver software can be used”, col. 3, lines 53-54 will result from implementing his print sharing system. The motivation to incorporate server based printing insures that distributed processing in an open platform is supported. Thus, it would have been obvious to one of ordinary skill in the art to incorporate a server print driver as taught in Cavill into the driver update system described in the Kathail patent because Kathail operates with drivers and Cavill suggests that optimization can be obtained with print drivers based on a distributed server network. Therefore, by the above rational, the above claim(s) are rejected.

7. Regarding claims 2, 36, Cavill teaches server applications executing at the server such as for a thin client, col. 3, lines 44-49. Thus, the above claim limitations are obvious in view of the combination.

8. Regarding claims 3, 9, 37, Kathail teaches driver names and versions, col. 10, lines 58-67. Thus, the above claim limitations are obvious in view of the combination.

9. Regarding claims 4, 29, 38, Kathail teaches a library, col. 6, lines 59-62. Thus, the above claim limitations are obvious in view of the combination.

10. Regarding claims 5, 18, 21, 30, 39, Kathail teaches same driver matching, col. 22, lines 40-41. Thus, the above claim limitations are obvious in view of the combination.

11. Regarding claims 6, 8, 19-20, 34, 40, Kathail teaches different driver matching but one that corresponds with notification, col. 22, lines 59-60, 63-64. Thus, the above claim limitations are obvious in view of the combination.

12. Regarding claims 7, Kathail teaches checking device driver name changes by category, col. 23, lines 53-60. Thus, the above claim limitations are obvious in view of the combination.

13. Regarding claims 10-11, 22-23, 32, Kathail teaches driver matching but without regard to version, col. 23, lines 29-33 wherein first the driver names are matched, thus without regard to version, then “resolves prioritized ties by using version information” with relevant notification, col. 3, lines 41-42. Thus, the above claim limitations are obvious in view of the combination.

14. Regarding claims 12-13, 24, Kathail teaches updating driver versions, col. 36, lines 10-14. Thus, the above claim limitations are obvious in view of the combination.

15. Regarding claims 31, Kathail teaches mapping drivers based on previous matches of devices as a device tree database and Name Registry, col. 6, lines 9, 23-25, 40-42 and installing new drivers, col. 6, lines 36-37 and 51-53 which inherently will have different names or identifiers. Thus, the above claim limitations are obvious in view of the combination.

3. Regarding claims 41, Kathail teaches exact matching as by name or version, col. 23, lines 28-29, drive name mapping, col. 6, lines 9, 23-25, 40-42 and close matching, col. 21, lines 58-63. Thus, the above claim limitations are obvious in view of the combination.

**Response to Amendment**

1. The broad claim language used is interpreted on its face and based on this interpretation the claims have been rejected.
2. The limited structure claimed, without more functional language, reads on the references provided. Thus, Applicant's arguments cannot be held as persuasive regarding patentability.
3. Applicant suggests "the applicant emphasizes that Kathail does not teach, or suggest, how to install a selected driver in a client/server computer system", Paper No. 7, Page 10, lines 16-17. Kathail's teachings are not mutually exclusive to PCs and a "computer system" reads on a network in a "client-server environment" and Cavill clearly teaches their applicability in a "client-server environment". Also, particularly in the McIntosh environment taught with AppleTalk and the like, the client is also the server with an attached printer interfaced to the client through a network interface card (NIC) in a "client-server environment". Applicant's arguments can not be held as persuasive regarding patentability.
4. Applicant suggests "Cavill would destroy any teachings of Kathail to select one printer driver from a plurality of printer drivers", Paper No. 10, Page 20, lines 1-2. The references should not be read in a vacuum, the teachings are not mutually exclusive, and must be taken in context of what was reasonable based on the subject matter as a whole as would have been understood at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. The clear description in the reference is not obfuscated by the numerous other suggested usages of said description in the reference. All the cited references teach a solution to meet driver adaptability, each solution does not destroy the others teachings. Actually, the cited references teach an enhanced solution to upgrade legacy drivers or when thin



Art Unit: 2141


clients are used as stated in Cavill with “the server is used for temporary storage and processing, thereby alleviating the burden from the NC”, col. 3, lines 48-50, as seen by its non-obvious teachings and by the teachings of Gao which was introduced to emphasis these points. Thus, Applicant’s arguments can not be held as persuasive regarding patentability.

### Conclusion

1. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure is disclosed in the Notice of References Cited. The other references cited teach numerous other ways to perform driver updates, thus a close review of them is suggested.
2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephan Willett whose telephone number is (703) 308-5230. The examiner can normally be reached Monday through Friday from 8:00 AM to 6:00 PM.
3. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Rinehart, can be reached on (703) 305-4815. The fax phone number for the organization where this application or proceeding is assigned is (703) 746-7239.
4. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-9605.

Sfw

January 8, 2004

  
**RUPAL DHARIA**  
SUPERVISORY PATENT EXAMINER